

AMENDMENT UNDER 37 CFR § 1.111  
Serial No. 09/527,584

### REMARKS

Reconsideration of this application is requested.

As a result of the foregoing amendments, a total of 30 claims remain in the present application. New claims 29 and 30 have been introduced to more particularly define features of the present invention. No other amendments have been effected in the claims, and no new subject matter has been introduced.

The foregoing amendments are presented in response to the Office Action mailed August 8, 2003, wherefore reconsideration is respectfully requested.

Referring now to the text of the Office Action, the Examiner has re-asserted his prior rejection of claims 1-28 under 35 U.S.C. § 102(e), as being anticipated by United States Patent No. 6,363,319 (Hsu). Such rejection is respectfully traversed in view of the discussion below.

In his response to the Applicant's arguments submitted June 12, 2003 (Paper No. 3), the Examiner asserts that United States Patent No. 6,363,319 (Hsu) "teaches a system and method for selecting a route for a flow from a number of network paths connecting a source to a destination, the involves: determining cumulative costs for a number of candidate paths from the computer network path using a cost bias which is dynamically calculated based on at least one of a flow attribute and a path attribute; and selecting an optimum path, corresponding to the selected route having a minimum or the cumulative costs" ... Based on this line of argument, the Examiner concludes that "As a result, APA does implement and teach a system and method of efficient, and dynamic allocation of shared network resources between connection oriented and connectionless traffic in a communication network

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Specifically, the Examiner has rejected claims 1 and 15 under s.102(e) as being anticipated by Hsu, arguing that Hsu teaches and describes a system and method for selecting a route for a flow from a number of network path that involves selecting route based on cost bias that is dynamically calculated based on flow and path attributes, with reference to col. 2, line 50 to col 3, line 38 of Hsu, the Examiner argues that Hsu provides determining a resource requirement of the connection-oriented traffic and dynamically adjusting a respective connectionless traffic metric based on the determined resource requirement of the connection oriented traffic. .

The applicants respectfully disagree that Hsu provides any teaching of dynamically adjusting a connectionless traffic metric... and thus Hsu fails to provide any basis for a s. 102(e) rejection.

The present application describes and claims aspects of a system and method of dynamic allocation of shared network resources between connection oriented and connectionless traffic in a communication network with features different from those in the prior art. Applicant respectfully submits that original claims 1 for a method and claim 15 for a shared network element do in fact explicitly identify those features that define the present invention over the prior art. Specifically, original claim 1 defines

1 A method of managing a logical allocation of resources between connection-oriented traffic and connectionless traffic being routed through a shared physical network element of a communications network, the method comprising the steps of:

a) determining a resource requirement of the connection-oriented traffic;

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**b) dynamically adjusting a respective connectionless traffic metric based on the determined resource requirement of the connection-oriented traffic**

Thus, -feature b) of main claims claim 1 and 15, provides that *a respective connectionless traffic metric is dynamically adjusted based on the determined resource requirement of the connection-oriented traffic*. Thus, in response to changes in resource requirements of connection oriented traffic, dynamic adjustment of the connectionless traffic metric (e.g an IGP metric) will explicitly affect forwarding of connectionless (hop-by-hop) traffic through the network. None of the cited references teaches or suggests this feature, nor the advantages obtained thereby.

Specifically, the applicants believe Hsu fails to provide basis for a s.102 rejection. Hsu exemplifies a method of constraint based route selection (e.g. see column 2, line 66, of Hsu) and Hsu is focused entirely on optimizing path oriented, or connection oriented, routing. Hsu in particular is directed to a particular approach to constraint based routing, based on cumulative costs, and a uses a biased cost approach to connection oriented routing, which is based on a Dijkstra technique. Nowhere does Hsu indicate that hop-by hop or connectionless routing system metrics are adjusted, and Hsu adjusts only the biased cost metrics used for constraint based, or, connection-oriented route selection

Thus the teaching of Hsu is entirely focused on optimising route selection for connection oriented traffic.

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There is no teaching in Hsu that changing resource requirements for connection oriented traffic would be used to adjust a traffic metric for connectionless traffic. Since the calculated bias costs of Hsu are not advertised to the network, the cost bias of Hsu does not cause adjustment of -a connectionless traffic metric

**Indeed, Hsu teaches away from adjusting the connectionless traffic metric: at col 6, lines 37, to 36, of Hsu, Hsu states that hop by hop routing is still based on the advertised cost metrics, and the biased cost route selection technique leaves the hop by hop routing system intact.**

Accordingly, Applicant respectfully submits that original claims 1 and 15 do in fact explicitly identify features that define the present invention over the prior art. Specifically, original claims 1 and 15 define that a respective connectionless traffic metric is dynamically adjusted based on the determined resource requirement of the connection-oriented traffic. . None of the cited references teaches or suggests this feature, nor the advantages obtained thereby.


New claims 29 and 30 respectively have been added further define a combination of features providing distinctions over the cited art, and are believed to define patentable subject matter.

In light of the foregoing, it is submitted that the presently claimed invention is clearly and unambiguously distinguishable over the teachings of the cited references. Accordingly, it is believed that the present application is in condition for allowance, and early action in that respect is now courteously solicited.

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If any extension of time under 37 C.F.R. § 1.136 is required to obtain entry of this response, such extension is hereby respectfully requested. If there are any fees due under 37 C.F.R. §§ 1.16 or 1.17 which are not enclosed herewith, including any fees required for an extension of time under 37 C.F.R. § 1.136, please charge such fees to our Deposit Account No. 19-5113.

Respectfully submitted,

  
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